DOCUMENT RESUME

ED 031 279 LI 001 645

By-Heron, D.W.

Specifications of a Mechanized Center for Information Services for a Public Library Reference Center. Final Report. Part 4, The State Library and Public Libraries of California as Centers for Information Services under the State Technical Services Act.

California Univ., Los Angeles. Inst. of Library Research.

Pub Date 31 Jan 68

Note-15p.; Related documents are LI 001 642, LI 001 643, LI 001 644, and LI 001 646

EDRS Price MF-$0.25 HC-$0.85

Descriptors-Automation, *Business, *Industry, Information Centers, *Information Services, *Public Libraries, State Libraries, *State Programs

Identifiers-*California, California State Library

The potential role of public libraries and the California State Library in a state-wide technical information system for business and industry is the topic of this report. Three levels of services are proposed for the system: (1) research centers (major academic libraries), (2) subject reference centers (major public libraries), and (3) local service-contact libraries. The State Library has funded a pilot reference center designed to serve initially as a prototype and ultimately to become the administrative center for the public libraries' reference centers throughout the state. A preliminary schedule for mechanization of services for the network is given. (CC)

ED031279

LI 001 645

THE STATE LIBRARY AND PUBLIC LIBRARIES OF CALIFORNIA AS CENTERS FOR INFORMATION SERVICES UNDER THE STATE TECHNICAL SERVICES ACT

By

D. W. Heron

Part 4 of the Final Report on

Specifications of a Mechanized
Center for Information Services
for a Public Library Reference Center

State Technical Services Act
Grant A 6 11-66

31 January 1968

Institute of Library Research
University of California
Los Angeles, California

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

TABLE OF CONTENTS

ABSTRACT i

WHY PUBLIC LIBRARIES?. 2

THE BONN REPORT. 3

DEVELOPMENT OF THE CALIFORNIA PLAN 5

POTENTIALITIES OF THE PUBLIC LIBRARIES 7

PROPOSALS, 1967-1972 11

CONCLUSION 12

ABSTRACT

Part 4 of the final report on Specification of a Mechanized Center for Information Services for a Public Library Reference Center presents the general results of discussions with various librarians of the State with respect to their evaluation of such services. It discusses the potential role of public libraries, plans for incorporating them into a system for information service to business and industry, and a preliminary schedule for implementation of those aspects relating to mechanized services.

THE STATE LIBRARY AND PUBLIC LIBRARIES OF CALIFORNIA AS CENTERS FOR INFORMATION SERVICES UNDER THE STATE TECHNICAL SERVICES ACT

The plans proposed by the Library Research Institute of the University of California and by the State Library of California constitute a significant part--possibly the most significant--of the state's participation in the State Technical Services Act program authorized by P.L. 89-182.

These plans for providing technical information services envisage two important innovations:

1. The development throughout the California public library system of an active program of library service to business and industry, and

2. The use of electronic data processing systems, particularly including digital computers, to enhance this service.

The Library Research Institute, charged with the advancement of library service and techniques, is particularly interested in the use of computers for improving access to technical information, shares with the State Library a strong interest in public library service to all of California, and sees in the State Technical Services Act an opportunity to improve library service to business and industry throughout the state. U.S. Department of Commerce plans to provide computer-tape subject access to federal research and development reports--improved access to this vast body of literature on the part of private industry being a primary objective of the STSA--makes the mechanization of these technical information centers an essential aspect of the program.

Beyond making reports assembled by the Commerce Department's Clearinghouse for Federal Scientific and Technical Information, the Atomic Energy Commission, N.A.S.A., and other federal agencies engaged in organized research available to the California industrial community, these programs look toward making utilization of the state's library resources more efficient and a more significant force in the economic development of California.

WHY PUBLIC LIBRARIES?

Since the principal research collections in California in the fields of science and technology are in such libraries as those of the University of California, Stanford University, and the California Institute of Technology why should the public libraries be called upon to serve a constituency which (with a few important exceptions) has been of little concern to them in the past?

With proper staffing and basic resources public libraries can provide better service to their local business and industrial communities because

A. They are advantageously located for prompt service, and have the opportunity to know the needs of business and industry in their communities.

B. They derive a substantial amount of their tax support from local businesses. Particularly as the burdens of service to their immediate constituencies increase, academic libraries are not as strongly motivated to serve small and medium-sized business concerns as are their community libraries.

C. The unnecessary use of research libraries when local libraries can provide needed information detracts from the research libraries' effectiveness not only in service to their institutions' teaching and research (of which the whole state is the ultimate beneficiary) but in their ability to supply reserves of more or less esoteric information which the local libraries cannot be expected to have.

Consistent with other national and regional plans for improving utilization of library resources the California STSA plan will make available in this latter sense not only the research libraries of the state but national resources as well.

It is obviously to the advantage of any seeker of information to obtain it from the nearest dependable source, and the technical information centers planned under the STSA are designed to be such sources, backed by regional and national research collections. Even a very small library can provide excellent service (as many special libraries do) if it contains basic reference resources and if its librarian knows where to obtain promptly material not in the library itself.

Fast and dependable access to other research resources when they are needed is, of course, a factor of prime importance. Awareness of regional or national resources and the means of communicating the required information rapidly are both necessary if a relatively small library is to serve as access point to a regional library system.

THE BONN REPORT

George Bonn, ~~the~~ following Lowell Martin's organization plan for multiple levels of access, proposes a hierarchy of three levels in his report to the State Librarian "Technical Information for California Business and Industry". He describes them as

1. Research centers (major academic libraries)
2. Subject (reference) centers (major public libraries)
3. Local service-contact libraries

Pursuing Bonn's recommendation it is the State Library's plan, in the third phase of its STSA program, to ask the following public library systems

to establish intermediate (subject-reference) centers, backed by the major research libraries of the state and national resources, including computer tapes:

Fresno County Library

San Francisco Public Library

Los Angeles Public Libraries (city and county)

San Diego Public Library

It is assumed that the computer tapes mentioned above will be an important part of this program, particularly because of Commerce Department plans for tape publication of subject lists of government R & D reports. Thus an important aspect of the technical information centers will be their capacity--in terms both of personnel and equipment--to make effective use of these and subsequent national information resources using tape or on-line computer access.

Bonn's report points to several problems which must be solved if the public library system is to provide effective technical information centers for the purposes of the State Technical Services Act. He senses a serious lack of communication between business and industry on the one hand and public libraries on the other, feels that public libraries do not as a rule have collections adequate to serving commerce and industry, nor staffs competent in these fields, particularly in science and technology, and is of the opinion, based upon a substantial number of interviews, that businessmen are unaware of the resources available to them in their local libraries.

Bonn discusses in some detail the notion of "Technology Transfer" or "spinoff" of federally subsidized research and development to use by

private business and industry, central to the purposes of the State Technical Services Act, and also enumerates the present major published sources of bibliographical access to reports of this research, published by CFSTI, the National Bureau of Standards, A.E.C., N.A.S.A., the National Library of Medicine, and other federal agencies. He expresses some doubt, however, about the demand among small and medium-sized businesses for the technical information resources thus available, and about public libraries ability to utilize them.

He concludes that most businesses unable to support their own libraries and research staffs depend for their information needs on

1. Small collections of reference books and trade publications,
2. Equipment suppliers,
3. Major libraries with established reputations for excellence in particular fields,
4. Chambers of Commerce and the Small Business Administration office in their cities,

if in fact they pursue technical information at all.

The Bonn report concerns itself only in passing with computers, microphotography, and communication techniques which would be required for the effective operation of STSA information centers.

DEVELOPMENT OF THE CALIFORNIA PLAN

In the State Library and all of the public libraries considered as subject-reference centers in the California STSA plan there is active interest in the use of new techniques for the retrieval of bibliographical information, as well as for administrative and clerical functions.

The State Library has funded, and plans shortly to have functioning, its pilot reference center designed to serve initially as a prototype and ultimately to become the administrative center for the public libraries' reference centers throughout the state.

Although initially their conventionally published sources will probably be of more importance than computerized sources, it is important to ascertain whether those libraries chosen as reference centers will be capable of utilizing computerized information in their service to industry as they become available.

This will require staff members capable of using data processing equipment effectively as the result of training and experience which, together with the need to implant in public libraries some of the outlook of special libraries, will be a condition of effective STSA technical information centers.

If they are effective, the business and industrial community will undoubtedly follow its own doctrine of the better mouse trap.

The incorporation of computers and other recent tools and techniques in these services will make them more efficient and more attractive to business.

Since the participation of public libraries in this system would be voluntary, those libraries chosen for inclusion as reference centers are likely to be those which demonstrate some affinity for innovation and some sensitivity to the needs of the business community, particularly in the areas of science and technology.

Beyond their present capabilities the educational program proposed jointly by the Institute and University of California Extension is an

important adjunct to the Centers for Information Services plan. The training of technical information specialists de novo and the continuing education of practicing librarians must be expanded if the plan is to be effective.

POTENTIALITIES OF THE PUBLIC LIBRARIES

I. Attitudes

Although Bonn was somewhat pessimistic about the general assumption by public librarians of their responsibility to the business and industrial community, and about the latter's recognition of the library's value to them, there appears to be a growing interest in at least the more progressive libraries in precisely the sort of service envisaged in the State Technical Services Act.

Two examples are to be found in the San Diego Public Library and the Los Angeles Public Library.

A. The San Diego Public Library serves a community in which there has been in recent years a deliberate effort to diversify its economic base, and in which many new businesses are developing. The Small Business Administration has a large and active San Diego office, and works in close cooperation with the Public Library, holding periodic meetings of small businessmen in the Library's auditorium (with attendance of as as many as 300) in which a member of the Library staff regularly participates describing the library resources available to them in the fields of business, science, technology or in whatever other areas they may show interest. These presentations are generally made by the head of the Library's Science and Industry Section, who reports (supported by statistics) that the response has been excellent.

   The development of the San Diego Public Library has been sensitive to the demands of the industrial community, and their government documents collection includes full depository sets of A.E.C. and N.A.S.A. technical reports as well as Patent Office and NBS publications. The library has recently acquired a full set of Polk directories and is rapidly building its collection of foreign and domestic trade catalogs.

The Library also participates centrally in two regional cooperative organizations, the Associated Science Libraries of San Diego, and the Serra Regional Library System, the latter supported in 1967 by a grant of $156,000 from State and Federal funds administered by the State Library. Both of these cooperative agencies are primarily concered with efficient access to information resources of the San Diego region, and the reference staff of the Serra system employs teletype to speed its service to member libraries.

B. The Los Angeles Public Library serves in the center of a tremendous business and industrial complex. This is not to suggest that the whole of this community uses the city library, but its use, particularly of the Business-Economics Department and the Science-Technology Department is substantial and increasing.

Both of these collections are well established and extensive, and the growth both of collections and services has increased with the growth of metropolitan Los Angeles.

Neither the Business-Economics Department nor the Science-Technology Department identifies all of the companies using its services, but a major part of their use, judged from the nature of inquiries, is consistent with the objectives of the California State Technical Services plan for information centers.

The other aspect of the Los Angeles Public Library which is of interest to the STS program is its use of data processing, first in borrower registration, and most recently in computerizing its acquisition processes. Both systems are apparently operating well, and their experience, with the order program particularly, could lead to information retrieval applications.

In this connection mention should be made of the Los Angeles County Library's efforts to continue its computer-based book catalog.

Their experiment with an optical-scanning input will, if successful, have far-reaching importance for information retrieval systems.

It is significant that this experiment is being conducted by one of the Libraries proposed for inclusion in the STS network.

It would not be realistic to assume that all public libraries in California--or even all major libraries in urban areas--are immediately capable of the sort of service envisaged in the STS-CIS plan. Nor, in fact is widespread initial participation necessary.

The ultimate success or failure of the sort of public library service here envisaged will be measured at the service points. To succeed it must establish and develop a demand for technical information, and beyond the routine promotion, this demand will be determined by the system's producing the right information at the right time and place.

The head of the Science-Technology Department of the Los Angeles Public Library reported that the mere announcement of passage of the State Technical Services Act has substantially increased the volume of their inquiries from business and industry.

The potential demand appears to be present, and capable of development, and the libraries in which this demand is felt and satisfied, even if only one or two are selected for initial participation, will establish patterns which other libraries can be expected to follow, if for no other reason than the pressure from the taxpayers as they recognize what their libraries can do for them.

II. Capabilities

Although, as Mr. Bonn suggests, innovation comes rather slowly in such institutions as libraries, it is reasonable to expect that given the proper organization, financial support, resources, hardware, and personnel, the Information Center network might develop according to the following schedule:

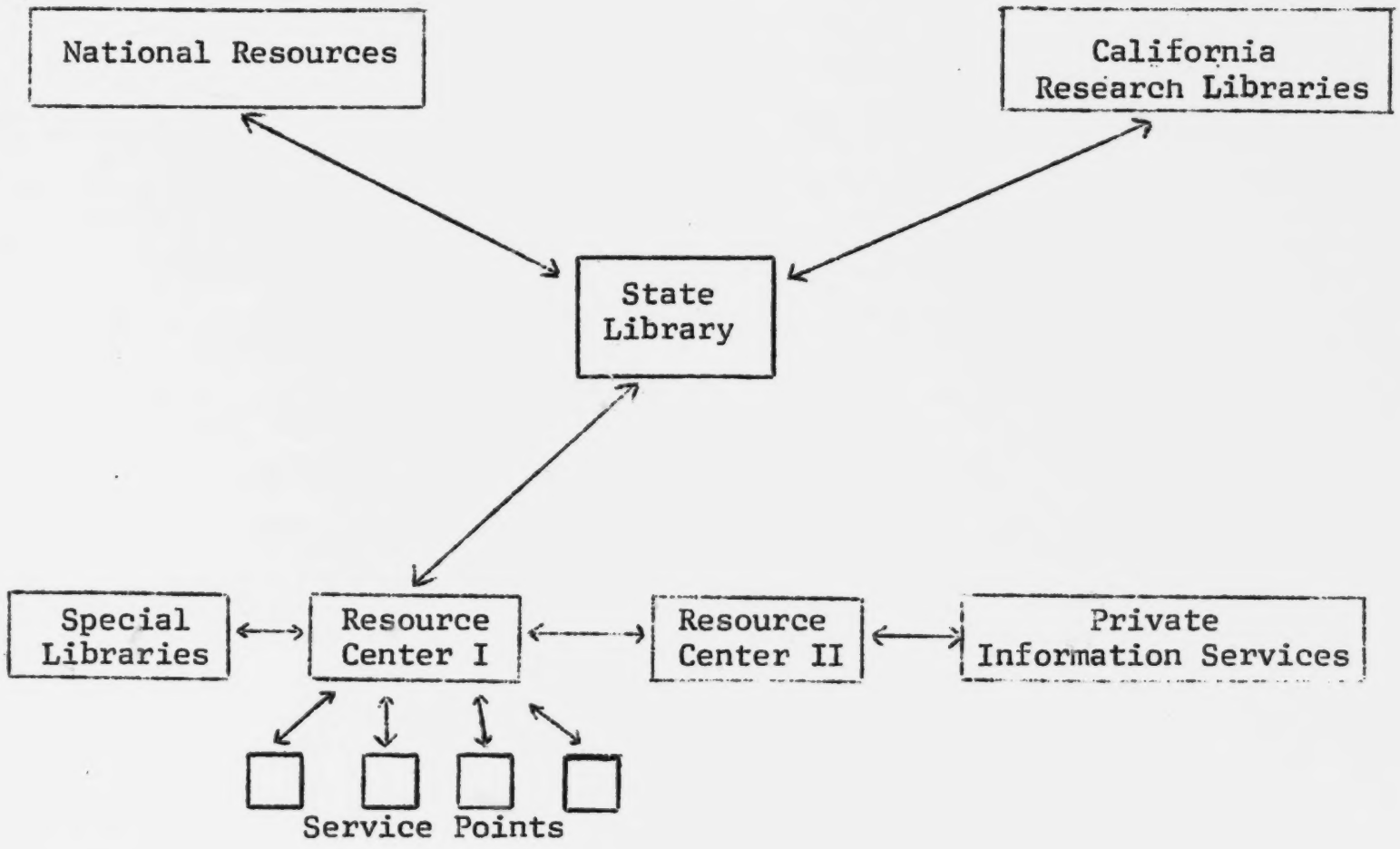
1967

> Establishment of the Pilot Program, California State Library, and its support of one or more combined Reference Resources and Service Centers, all depending upon and developing conventional resources--particularly technical report literature and journals. Experiments with new copying and communications methods, and with administrative applications of electronic data processing. Expansion of training in technical services.

1972

Introduction of computerized bibliography and information retrieval systems using tape produced regionally or nationally. Expansion of network, to include more reference resource centers and (primarily within large metropolitan library systems) subordinate service points in smaller libraries.

Development of a regional communications network employing telephone, teletype, closed-circuit television, and facsimile equipment, as follows:



Development of special fields of strength in resource centers. Increasing use of microtexts. Experiments with direct communication between resource centers and business and industrial information offices and special libraries. Increased selective dissemination of technical information.

1976

Increasing direct communication between different levels of the network, with resource centers and the State Library serving increasingly a "reference" or "switching" function. Extensive use of both digital and analog (facsimile) transmission of information in full text and abstract.

PROPOSALS, 1967-1972

I. California State Library

The Pilot Project should be staffed at the earliest possible date not primarily as an information center directly serving business and industry, but in the normal pattern of service of a state library agency,

A. Providing at least token financial support from STSA funds for development of existing services to business and industry in one or more public libraries where such service is active.

B. Developing bibliographical control over scientific and technical information. Two publications are here suggested:

1. A brief annotated and carefully indexed bibliography based upon Bonn's list of federal R & D publications, indicating if possible locations of depository collections in California libraries.

2. A brief, selective list of federal or private sources, or potential sources, of technical information or scientific and technical bibliography on computer tape. This based on the Catalog of the Library Research Institute. (This should be a joint publication with the Institute.)

C. Conduct of an intensive "marketing" survey in one metropolitan area, limited primarily to small and medium-sized business and industry, to measure demand for particular types of information. The questionnaire could be fairly detailed (drawn from B-1 and 2 above, but also reference books and journals) and descriptive.

D. Conduct of experiments with communication techniques, especially facsimile, between the State Library, the public library (libraries) chosen as a STS information center, and possibly one university or special library.

II. Library Research Institute

A. Increase the number of trained technical information specialists produced both at the professional level and in pre- and post-professional extension courses.

B. Assist the State Library in production of the guide to computer tape information sources (I, B-1 above) and in furthering such programs as the Book Catalog project and computerized union lists of serials and other sources of scientific and technical information. The Institute could also conduct the survey suggested as I-C, above.

C. Make available to the State Library current information on the development of the University's Center for Information Services, for publication to interested public libraries, as well as information on newly established computer tape sources relevant to the STS-CIS, as well as sources of microfilms and communications systems.

D. As tape and microfilm sources become available, assist the State Library and affiliated Reference Center Libraries in selecting equipment, planning and programming for their effective use.

CONCLUSION

George Bonn's report indicates that there are not many public libraries able and willing to assume the responsibilities proposed in the UC Library Research Institute--California State Library proposals for STS information service.

It is recommended that in the beginning only one or two public libraries with well-established programs of service to business and industry be asked to participate, that the State Library immediately assume its role of support (with information and funds) of existing programs, rather than to duplicate these direct services with uncertain prospects of success.

The Library Research Institute can advance the STS program by providing information and assistance in feasibility studies, systems analysis, and publication of guides for development and automation of information centers, and by developing both the UC Center for Information Services, and the training of more technical librarians and information scientists.

The basic assumption is that if the libraries of California can demonstrate concretely what services they can offer business and industry, these services will be used.